

THE RIDDLE OF THE UNIVERSE

lated *hydropolyps*, have no nerves or higher sense-organs, although they are extremely sensitive. On the other hand, the free-swimming medusæ, which are developed from them—and are still connected with them by alternation of generations—have an independent nervous system and specific sense-organs. Here, also, we may directly observe the ontogenetic evolution of the nerve-soul (*neuropsyché*) out of the tissue-soul (*histopsyché*), and thus learn its phylogenetic origin. This is the more interesting as such phenomena are *polyphyletic*—that is, they have occurred several times—more than once, at least—quite independently. As I have shown elsewhere, the hydromedusæ have arisen from the hydropolyps in a different manner from that of the evolution of the scyphomedusæ from the scyphopolyps; the gemmation is terminal in the case of the latter, and lateral with the former. In addition, both groups have characteristic hereditary differences in the more minute structure of their psychic organs. The class of siphonophora is also very interesting to the psychologist. In these pretty, free-swimming organisms, which come from the hydromedusæ we can observe a double soul: the *personal soul* of the numerous individualities which compose them; and the common, harmoniously acting psyche of the entire colony.

IV. *The nerve-soul (neuropsyché)*: fourth stage of phyletic psychogeny.—The psychic life of all the higher animals is conducted, as in man, by means of a more or less complicated “psychic apparatus.” This apparatus is always composed of three chief sections: the *organs of sense* are responsible for the various sensations; the *muscles* effect the movements; the *nerves* form the connection between the two by means of a special central organ, the brain or ganglion. The arrangement